DOCUMENT RESUME

ED 301 326 PS 017 625

AUTHOR Johnson, Jessie
TITLE Adaptation of Curriculum, Instructional Methods, and Materials Component: Instructional Aide Program. Final Evaluation Report.
INSTITUTION Columbus Public Schools, OH. Dept. of Evaluation Services.
PUB DATE Jul 88
NOTE 53p.; For 1986 report, see ED 285 943. For 1987 report, see ED 288 180.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Elementary School Students; Grade 1; *Kindergarten Children; *Language Skills; Oral Language, Primary Education; *Program Effectiveness; Reading Skills; *Student Improvement; *Teacher Aides; Written Language
IDENTIFIERS *Columbus Public Schools OH

ABSTRACT

Funded through the Ohio Disadvantaged Pupil Program Fund, the Columbus Public Schools' Instructional Aide (IA) Program served 276 kindergarten children and 1,780 first-grade students during the 1987-88 school year. The goal of the IA program was to provide an educational support program for underachieving pupils. Instructional aides were trained to provide direct instructional service to selected pupils in the classroom. The program, which was implemented in 57 buildings and involved the equivalent of 137 aides serving 197 teachers, emphasized activities which would increase oral language, written language, and reading skills. Program evaluation efforts involved the administration of sub-tests of the Comprehensive Tests of Basic Skills to kindergarten children and first-grade students, and the use of locally constructed surveys of staff and reading assessments of students. The attendance criterion of 97 days was met by 156 kindergarten children and 1,118 first-graders; of these, 991 pupils received pre- and posttest administrations of the achievement test. Most program objectives were attained, and even when they were not, evidence of program success was found. The continuation of the IA program was recommended. Survey forms and assessment instruments are appended. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED301326

Ohio Disadvantaged Pupil Program Fund

FINAL EVALUATION REPORT
ADAPTATION OF CURRICULUM, INSTRUCTIONAL METHODS, AND MATERIALS COMPONENT
INSTRUCTIONAL AIDE PROGRAM

July 1988

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Written by:

Jessie Johnson
Professional Specialist

Under the Supervision of:

Sharon Bermel
and
Richard A. Amorose, Ph.D.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Gary Thompson
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Columbus (Ohio) Public Schools
Department of Evaluation Services
Gary Thompson, Ph.D., Director

PS 017625

Ohio Disadvantaged Pupil Program Fund

FINAL EVALUATION REPORT
ADAPTATION OF CURRICULUM, INSTRUCTIONAL METHODS, AND MATERIALS COMPONENT
INSTRUCTIONAL AIDE PROGRAM
1987-88

ABSTRACT

Description: The Instructional Aide Program served 2056 pupils in kindergarten and first grade. Funding of the program was made available through the Ohio Disadvantaged Pupil Program Fund of 1987-88.

The goal of the Instructional Aide Program is to provide an educational support program for underachieving pupils. The instructional aides were trained to provide direct instructional service to selected pupils in the classroom setting. Teachers involved with the program were assigned an aide for one-half day and provided direct supervision for the aide. The aides attended inservice training sessions and were provided with supplementary materials and many instructional activities in the areas of oral language, written language, and reading skills.

The Instructional Aide Program was located in 57 buildings with an equivalent of 137 aides serving 197 teachers. The average number of pupils served by an aide was 17.3 in kindergarten, and 19.7 in first grade.

Time Interval: For evaluation purposes, the Instructional Aide Program started September 28, 1987 and continued through April 15, 1988. This interval of time gave 121 days of program instruction. Pupils included in the final pretest-posttest analysis must have attended at least 97 days (80%) during the time period stated above.

Activities: Implementation of the program was accomplished through daily instructional activities to strengthen and extend regular classroom instruction. Emphasis was placed on activities which would increase oral language, written language, and reading in order to enhance those skills needed to be successful in school.

Program Objectives: Objective 1.1 (for kindergarten) and Objective 1.2 (for first grade pupils at or below the Reading Readiness stage) both stated that pupils who attended at least 80% of the program year would show an average gain of at least 1.0 NCE point for every month of instruction, as determined by a nationally standardized achievement test. Objective 2.0 stated that pupils would improve significantly in reading and language arts, as perceived by their teachers. Objective 3.0 was to provide training sessions for participants regarding materials and skills necessary to perform the stated tasks of the instructional aides. The sessions would be perceived as meaningful and helpful by 80% of the participants.

Evaluation Design: The major evaluation effort was accomplished through the collection and analysis of the Oral Comprehension Test of the Comprehensive Tests of Basic Skills, Level A (CTBS;1981) for kindergarten. For first grade the Vocabulary and Oral Comprehension Tests, Level B, were administered in the Fall; the Vocabulary and Reading Comprehension Tests, Level C, were administered in the Spring. A comparison could not be made between the Oral Comprehension and Reading Comprehension tests. Analyses were based on a comparison of the Total Reading score. Analyses of the data included comparison between pretest and posttest scores in terms of raw scores, grade equivalents, percentiles and NCEs. Locally constructed surveys were used to obtain data from staff involved in the program and the Student Assessment Form was completed by each first grade aide to ascertain the progress of target pupils in reading.

Major Findings/Recommendations: The information collected on the Pupil Census Form indicated that 276 kindergarten pupils and 1780 first grade pupils were pretested and formed the basic group to be served by the project during the 1987-88 school year. The average daily membership in the kindergarten component was 238.6. The average hours of instruction per week was 2.7. The average daily membership in the first grade component was 1542.8. The average hours of instruction per week was 2.9.

The attendance criterion was met by 156 kindergarten pupils, or 56.5% of the 276 pupils served. Of these, 143 pupils received both administrations of the achievement test. The attendance criterion was met by 1118 first grade pupils, or 62.8% of the 1780 pupils served. Of these, 991 pupils received both administrations of the achievement test.

A review of the kindergarten component indicated that (except for one criterion) the program objectives were achieved for the 1987-88 school year. There was evidence that all the criteria specified except Criterion 3.2 in the evaluation design were achieved. In particular, an analysis of the pretest-posttest achievement data for the 143 pupils in the evaluation sample showed an average NCE gain of 4.3 per month for the 6.1 month project period. Data indicated Criterion 3.2 called for evidence that the aides would perceive the training sessions were helpful in the classroom. Overall, response indicated the criterion was not attained, but did indicate areas of success and those which should be considered in future program planning.

A review of the data for the first grade component indicated that all the objectives of the program except one (Objective 1.2) were achieved for the 1987-88 school year. Objective 1.2 called for an average gain of 1.0 NCEs for each month of the program. The average growth of the 991 pupils in the evaluation sample was 3.9 NCEs for the 6.1 month period. While the level of achievement did not occur as was anticipated, teacher ratings indicated that the reading skills of target pupils were substantially enhanced through direct interaction with the instructional aide. Changes in NCE scores indicated 587 (59.2%) pupils made gains which indicated a positive change from the pupil's original standing. In addition, an assessment of basal reading level growth showed that more than two-thirds of the pupils gained four or more basal levels.

Considering the basic importance of reading skills to the educational process, as well as the major role that a lack of such skills play in inhibiting the progress of underachieving students, efforts to improve the effectiveness of the whole language approach to reading instruction should be encouraged. The present program, having demonstrated effectiveness by improving the reading skills of underachieving pupils, should be continued.

Ohio Disadvantaged Pupil Program Fund

FINAL EVALUATION REPORT
ADAPTATION OF CURRICULUM, INSTRUCTIONAL METHODS, AND MATERIALS COMPONENT
INSTRUCTIONAL AIDE PROGRAM

July 1988

Program Description

The goal of the Instructional Aide Program is to provide an educational support program for underachieving pupils. The instructional aides were trained to provide direct instructional service to selected pupils in the classroom setting. Teachers involved with the program were assigned an aide for one-half day and provided direct supervision for the aide. The aides attended inservice training sessions and were provided with supplementary materials and many instructional activities in the areas of oral language, written language, and reading skills. The aides were also provided assistance whenever needed by two program coordinators who regularly visited the aides at their schools and prepared and presented some of the inservice programs to the aides.

The Instructional Aide Program was located in 57 buildings with 137 aides serving 197 teachers. The first grade aides program was located in 57 buildings with an equivalent of 90.5 aides serving 181 teachers. The kindergarten program was conducted in 10 buildings with an equivalent of 14 aides serving 16 teachers. The buildings served by the program are listed below.

Schools Served by the
Instructional Aides Program

Arlington Park	Eakin	Kent	Reeb
Avondale*	East Columbus	Koebel	Salem
Beck*	Eastgate	Leawood	Scioto Trail
Binns	East Linden	Lincoln Park*	Second*
Broadleigh	Fair	Linden	Siebert
Burroughs	Fairmoor	Livingston*	South Mifflin
Cassady	Fifth	McGuffey	Southwood
Cedarwood	Georgian Hts.	Main*	Stockbridge
Clarfield	Hamilton	Maize	Sullivant*
Clinton	Heyl	Medary	Trevitt*
Como	Highland	Moler	Weinland Park
Cranbrook	Hubbard*	North Linden	West Broad
Dana*	Hudson	Ohio	Westgate
Deshler	Indianola	Pilgrim	West Mound
			Windsor

* Schools with both kindergarten and first grade aides

Evaluation Objectives

The following objectives provided direction for the program components:

Objective 1.1 Given the opportunity to participate for at least 80% of the measured period of instruction, kindergarten pupils will show an average gain in reading of 1.0 normal curve equivalent (NCE) point for every month in the program as determined by a nationally standardized reading achievement test.

Objective 1.2 Given the opportunity to participate for at least 80% of the measured period of instruction, first grade pupils identified as being at the reading readiness stage of development or below in September 1987 and selected for the program will show ar average gain in reading of 1.0 NCE point for every month in the program as determined by a nationally standardized reading achievement test.

Objective 2.0 Given service of an instructional aide in the classroom, 80% of the teachers will perceive that pupils receiving instructional assistance by the aide improved significantly in reading and language arts as a direct result of that service.

Criterion 2.1 Evidence of pupil improvement in reading and language arts as a result of the services of the aides as adjudged by the classroom teachers.

Objective 3.0 To provide meaningful training sessions for participants regarding materials and skills necessary to perform the stated tasks of the instructional aides.

Criterion 3.1 Evidence that 80% of the participants perceived each training session to be meaningful.

Criterion 3.2 Evidence that 80% of the participants perceived the content of the training sessions as helpful in the classroom setting.

Pupils were observed in September 1987 and were selected for service. The treatment period for evaluation purposes was 121 days, from September 28, 1987 to April 15, 1988.

Evaluation Design

The evaluation design provided for the collection of data in five areas of program operation. Except for the standardized achievement tests, the instruments used to collect the data are found in the Appendix.

1. Standardized Achievement Test Information

The Oral Comprehension test of the Comprehensive Tests of Basic Skills, Level A (CTBS, 1981), was used to determine kindergarten pupil achievement gains. For grade one the Vocabulary and Oral Comprehension tests, Level B, were administered as the pretest; Vocabulary and Reading Comprehension tests, Level C, were administered as the posttest. Because the comprehension tests in Levels B and C are not on a common scale, the decision was made to base the analysis of the grade one results on the Total

Reading score which is a combination of the average of the Vocabulary and Comprehension scale scores. In both kindergarten and grade one, the pretest was administered the week of September 21, 1987, and the posttest was administered the week of April 18, 1988.

2. Pupil Census Information

A Pupil Census Form (locally constructed) was completed by program teachers and aides for each pupil served, to provide the following information: days of program enrollment, days of program attendance, and hours of instruction per week. Also asked were questions regarding the pupil's involvement in the Chapter 1 CLEAR program and if the pupil was non-English speaking. Collection of these forms was completed in May 1988.

3. Classroom Teacher Survey Information

The Classroom Teacher Survey was completed by the teachers to whom aides were assigned. The purpose of the instrument was to obtain teachers' perceptions of: (a) impact of the aides' services on the pupils' reading skills, and (b) various aspects of the functioning of the program in the classroom. The locally developed survey was administered during May 1988.

4. Inservice Evaluation Information

Fifteen inservice training sessions were provided for the instructional aides throughout the school year. At the end of each session, the aides were asked to rate the value of the session by completing the Instructional Aide Program Training Survey. Finally, during early May 1988, the Instructional Assessment Instrument was sent to all instructional aides in order that they could assess the degree to which the content of the training sessions were adjudged to be of help in fulfilling their responsibilities in the classroom. Dates and topics of inservice meetings were as follows:

Date	Topic
Sept. 3, 1987	Manuscript
Sept. 8, 1987	Manuscript Practice
Sept. 10, 1987	Orientation: First Grade Resource Guide
Sept. 15, 1987	Storytelling and Puppetry for Instruction
Sept. 17, 1987	Reading Readiness and Basal Reading, Level I
Sept. 22, 1987	Children's Literature
Sept. 24, 1987	Lesson Plan Development and Effective Record Keeping/Child Growth and Development
Sept. 29, 1987	Basal Reading Program
Oct. 6, 1987	Writing and Alternative Reading
Oct. 8, 1987	Classroom Management - Motivation - Discipline
Oct. 13, 1987	Reading Recovery Program Techniques

Oct. 15, 1987	Instructional Techniques for Students in Kindergarten
Nov. 19,. 1987	The Effective Use of the Revised Resource Guide
Jan. 19 & 21, 1988	Continuance of Training Session (9/10/87): Resource Guide - Reading Comprehension
Feb. 23 & 25, 1988	Continuance of Training Session (1/19/88): Resource Guide - Reading Comprehension

5. Student Assessment Form

A Student Assessment Form was completed by the program teacher and aide for each selected first grade classroom served. The purpose of the instrument was to obtain information regarding the reading progress of each pupil enrolled in May. The instrument provided a classroom list of program pupils and provided a space for teachers to enter the following information for each pupil: reading series and/or program employed for instruction, fall and spring basal reading levels, grade promotion status, and Chapter 1 service status. Collection of these forms was completed in May 1988.

Major Findings

Kindergarten Component

The Pupil Census Form data indicated that 276 pupils were served by the project during the 1987-88 school year. The average number of pupils served during the year by the 16 aides was 17.3. The average daily membership (ADM) in the kindergarten component was 238.6. The average hours of instruction per week was 2.7.

First priority for pupil selection was given to underachieving pupils not served by Chapter 1 All Day Kindergarten (ADK). Second priority for selection was at the option of the classroom teacher to include underachievers who were also being served in Chapter 1 ADK. Of the 276 pupils who were served by the program, 118 (42.8%) were also served in Chapter 1 ADK.

The information collected on the Pupil Census Form is summarized in Table 1. The number of pupils fulfilling the requirement of attending 80% (97) of the project days was 156 (56.5%) out of a total of 276 pupils served by the project. The pretest-posttest analysis included 143 pupils out of the 156 pupils who took both the pretest and the posttest and met the 80% attendance criterion.

The analysis of pretest-posttest achievement data for raw score minimums, maximums, averages, and standard deviations is shown in Table 2. The achievement test used was the Oral Comprehension Test of The Comprehensive Tests of Basic Skills (CTBS, 1981), Level A. The achievement data in Table 2 indicate that the average change in raw score from the pretest to the posttest was 4.3 items for the 143 pupils who took both the pretest and posttest.

The analysis of pretest-posttest achievement data for percentile minimums, maximums, medians and standard deviations is shown in Table 3. The median percentile for the pretest was 14, while the median percentile for the posttest was 36.

Table 1
Number of Pupils Served, Averages for Days of Enrollment, Days of Attendance, Daily Membership and Hours of Instruction Per Week, and Pupils Attending 80% of Days Reported by Grade Level

Grade	Pupils Served	Girls	Boys	Average Days of Enrollment	Average Days of Attendance	Average Daily Membership	Average Hrs. of Inst. Per Pupil Per Week	Pupils Attending 80% of Days
K	276	113	163	105.6	89.3	238.6	2.7	156

Table 2
Minimum, Maximum, Average, and Standard Deviation of the Pretest and Posttest Raw Scores Reported by Grade Level

Grade	Number of Test Items	Number of Pupils	Pretest Min.	Pretest Max.	Pretest Average Correct	Pretest Standard Deviation	Posttest Min.	Posttest Max.	Posttest Average Correct	Posttest Standard Deviation	Average Change
K	15	143	0	14	6.9	2.7	0	15	11.2	2.5	4.3

The presentation of achievement data thus far includes results from the analysis of raw scores and percentiles. Raw scores are equal units of measurement but can only provide a limited interpretation of achievement data. Percentiles provide comparative information but are not equal units of measure. Caution is advised in drawing conclusions about program impact from any of the scores above. Normal curve equivalents (NCEs) are generally considered to provide the truest indication of student growth in achievement, since they provide comparative information in equal units of measurement.

Data for NCEs are presented in Table 4. The analysis of the pretest-posttest achievement data for the 143 pupils meeting the 80% attendance criterion and who took both the pretest and posttest indicated an average growth of 19.4 NCEs or 3.2 NCEs per month for the 6.1 month period. Objective 1.0 was therefore achieved for the kindergarten component of the Instructional Aide Program.

Table 5 contains data related to changes in NCE scores for three ranges: (a) no improvement in NCE scores (0.0 or less), (b) some improvement in NCE scores (0.1 to 6.9), and (c) substantial improvement in NCE scores (7.0 or more). The data indicate that 118 (82.5%) pupils made gains in NCE scores. More specifically, 103 (72.0%) made substantial improvement and 15 (10.5%) made some improvement in NCE scores, and 25 (17.5%) made no improvement, as evidenced by a gain of 0.0 or decrease in NCE score.

In May the teachers participating in the program were surveyed to evaluate their perceptions of the impact of the services of the aides on kindergarten pupils' reading readiness skills. Of the 16 teachers surveyed, 12 (75.0%) returned the survey. The first part of the survey asked the teachers to respond to eight statements concerning the performance of the instructional aide as well as the adequacy of the CTBS testing instrument. The second part of the survey asked the teachers to respond to 12 statements concerning the degree of progress by target pupils which could be attributed to the efforts of the instructional aide. The third part of the survey asked teachers to indicate the number of pupils retained and the number that might have been retained were it not for the services of the instructional aide. The teachers responded to the items in Part 1 and 2 using a 5-point rating scale of (1) Strongly Disagree, (2) Disagree, (3) Undecided, (4) Agree, and (5) Strongly Agree. Tables 6, 7,and 8 contain a summary of responses to the three parts of the survey. The teachers' agreement with item 1 (Table 6) together with the pupils' gain in reading scores as reported in Tables 4 and 5 is a clear indication that Criterion 2.1 specified in Objective 2.0 was achieved. There is evidence that kindergarten pupils' reading readiness skills improved as a result of the services of the aides as judged by the classroom teachers.

Of the 12 teachers responding to item 6, six indicated that the CTBS was not an accurate measure of reading readiness; the other teachers were unsure (5) or agreed (1) with the accuracy of the measure. Response to item 7 and 8 indicated test instructions and the time allotted for testing were adequate.

Table 3
Minimum, Maximum, Median, and Standard Deviation
of the Pretest and Posttest Percentiles
Reported by Grade Level

Grade	Number of Pupils	Pretest				Posttest			
		Min.	Max.	Median Percentile	Standard Deviation	Min.	Max.	Median Percentile	Standard Deviation
K	143	3	89	14	19.3	1	96	36	28.1

Table 4
Minimum, Maximum, Average, and Standard Deviation of the
Pretest and Posttest Normal Curve Equivalents (NCE)
Reported by Grade Level

Grade	Number of Pupils	Pretest				Posttest				Average Change
		Min.	Max.	Average NCE	Standard Deviation	Min.	Max.	Average NCE	Standard Deviation	
K	143	12	75	27.7	14.9	1	87	47.1	20.3	19.4

Table 5
Changes in Normal Curve Equivalents (NCE) Scores
for Kindergarten Pupils
1987-88

	Pupils in Sample	No Improvement (0.0 or less)	Some Improvement (0.1 to 6.9)	Substantial Improvement (7.0 or more)
Number of Pupils	143	25	15	103
% of Pupils		17.5%	10.5%	72.0%

Overall, 84.7% of the ratings by teachers attributed pupil progress to the instructional aide as indicated by positive ratings of the 12 skill areas which are listed in Table 7. The average rating was 4.0 (3 is Undecided and 4 Agreement).

The teachers agreed that aides made a significant contribution to pupils in 10 of the 12 areas surveyed. Six teachers (50.0%) indicated that the aides did not provide opportunities for pupils to participate in imaginative situations and pantomine, puppetry, and role playing; and the ratings indicated the revised Resource Guide and Handbook was not valued to the degree expected. It should be noted that the first grade handbook was revised and not the one for kindergarten. The revised first grade Resource Guide and Handbook was utilized for instructional purposes in the joint kindergarten/first grade training sessions periodically throughout the year. The use of the handbook was based on the assumption that information shared, regarding the whole language approach to instruction, was applicable to all in attendance. Process data indicated aides did not perceive the content of the training sessions to be as helpful in the kindergarten classroom as expected.

Teacher responses to part three of the survey, Table 8, indicated that only one pupil was retained this year and that a total of 16 additional pupils might have been retained were it not for the services of the instructional aides as judged by those teachers responding. The data indicated that an average of 1.3 pupils per teacher were probably promoted and were not retained as a result of having additional instructional support by each instructional aide.

The data indicate that Criterion 2.1 specified in Objective 2.0 was achieved. Teacher ratings were highly positive, but would appear to suggest one area of concern for future consideration in program planning: the adequacy of the CTBS as an accurate measure of reading readiness.

During the year, a series of 15 inservice sessions was provided for the kindergarten and first grade instructional aides. At the end of each session, the aides were asked to rate the value of the session by completing the Instructional Aide Program Training Survey. The overall evaluation of the content presented at the session is summarized in Table 9. The evidence shows that the aides perceived the inservice sessions to be very informative, interesting, and worthwhile. Thus, Criterion 3.1 was achieved.

In May, 1988, the Instructional Assessment Instrument was sent to the kindergarten instructional aides. The purpose of this instrument was to assess the value of the inservice after the aides had an opportunity to apply the inservice training and materials in the classroom. The aides were asked to respond to 14 statements by circling (1) Strongly Disagree, (2) Disagree, (3) Undecided, (4) Agree, and (5) Strongly Agree. Of the 16 aides, 15 (93.8%) returned the survey. Table 10 contains the findings. The evidence outlined in Table 10 shows that Criterion 3.2 was not attained. Overall, there was a 74.8% positive response of the 14 statements regarding the value of inservice listed in Table 10. While aides' ratings were not as positive as anticipated, they did appear to highlight areas of concern for future consideration in program planning (i.e., the perceived helpfulness of inservice training sessions for kindergarten aides and the utilization of the Resource Guide and Handbook).

Table 6
Average Response and Percent of Responses to
Part 1 of the Classroom
Teacher Survey (Kindergarten)

Item	Number Responding	Average Response	Percent SD (1)	D (2)	U (3)	A (4)	SA (5)
1. The overall readiness to read of pupils in the target group has improved significantly as a direct result of interacting with the instructional aide.	12	3.9	0.0	16.7	0.0	58.3	25.0
2. The instructional materials made by the aide were useful in working with children.	12	4.4	0.0	0.0	8.3	41.7	50.0
3. The instructional aide has a basic understanding of how kindergarten pupils begin to read.	12	4.2	0.0	0.0	16.7	50.0	33.3
4. The Resource Guide and Handbook developed for the program has been of great value to the aide in helping pupils.	12	3.4	8.3	0.0	41.7	41.7	8.3
5. During readiness activities, the instructional aide relates well to the pupils.	12	4.3	0.0	0.0	8.3	50.0	41.7
6. The CTBS test instrument seemed to be an accurate measure of reading readiness.	12	2.3	25.0	25.0	41.7	8.3	0.0
7. The instructions given to complete the CTBS testing process were adequate.	12	4.3	0.0	0.0	0.0	75.0	25.0
8. The time alloted for testing was adequate.	12	4.2	0.0	0.0	0.0	83.3	16.7

Table 7
Average Response and Percent of Responses to
Part 2 of the Classroom
Teacher Survey (Kindergarten)

Item	Number Responding	Average Response	Percent SD (1)	D (2)	U (3)	A (4)	SA (5)
1. Relate and share experiences and stories in correct sequence	12	4.2	0.0	0.0	8.3	66.7	25.0
2. Participate in imaginative situations: pantomime, puppetry, role playing, etc.	12	3.1	0.0	50.0	0.0	41.7	8.3
3. Write the letters of the alphabet	12	4.3	0.0	8.3	0.0	50.0	41.7
4. Write their names and numbers (1-20)	12	4.5	0.0	0.0	0.0	50.0	50.0
5. Deliver oral messages correctly	12	3.9	0.0	0.0	25.0	58.3	16.7
6. Listen and respond to stories, poems, plays and other literary	12	4.2	0.0	0.0	16.7	50.0	33.3
7. Recall details, stories	12	4.3	0.0	0.0	8.3	58.3	33.3
8. Differentiate likes, similarities, shapes, sizes, facts and fantasies	12	4.3	0.0	0.0	8.3	58.3	33.3
9. Know the sounds of single consonants	12	4.3	0.0	8.3	0.0	50.0	41.7
10. Match words to pictures	12	4.1	0.0	8.3	8.3	50.0	33.3
11. Understand the main idea	12	3.9	0.0	8.3	8.3	66.7	16.7
12. Recognize basal words from the Ginn reading series	12	4.3	0.0	8.3	8.3	33.3	50.0

Table 8
Average Response and Percent of Responses to
Part 3 of the Classroom
Teacher Survey (Kindergarten)

Item	Number of Teachers	Number of Pupils	Average Number of Students
1. How many pupils are you retaining this year?	12	1	0.8
2. How many additional pupils might you have retained were it not for the services of the instructional aide?	12	16	1.3

Table 9
Instructional Aides' Responses Relating to the
Fifteen Inservice Sessions

Content Presented Was	Percent
a. Very Informative	77.9
Informative	21.9
Not Informative	0.1
b. Very Interesting	74.2
Interesting	25.2
Not Very Interesting	0.6
c. Very Worthwhile	73.8
Worthwhile	25.0
Not Worthwhile	1.2

Table 10
Average Response and Percent of Responses
for Part 1 of the Instructional Assessment
Instrument (Kindergarten)

Item	Number Responding	Average Response	Percent SD (1)	D (2)	U (3)	A (4)	SA (5)
1. As a result of the inservice training sessions, I have a greater understanding of how kindergarteners get ready to read.	15	3.9	6.7	13.3	6.7	33.3	40.0
2. The inservice training sessions have helped me to effectively participate in the reading readiness activities which are conducted in a kindergarten classroom.	15	3.8	6.7	13.3	6.7	40.0	33.3
3. As a result of the inservice training sessions, I have a better understanding of the concerns and responsibilities that a kindergarten teacher has toward the beginning instruction of reading.	15	3.7	6.7	13.3	13.3	40.0	26.7
4. The topics presented in the inservice training sessions were helpful to me in understanding my job in the classroom.	15	3.9	0.0	13.3	6.7	60.0	20.0
5. I understand how the Ginn reading series is to be used at the kindergarten level.	15	3.9	0.0	13.3	13.3	46.7	26.7
6. During the inservice training sessions, I learned many activities and instructional methods which may be used in the instruction of reading with kindergarten pupils.	15	3.5	6.7	20.0	13.3	33.3	26.7
7. These inservice sessions have made me aware of the instructional resources made available by our school system.	15	4.2	0.0	0.0	6.7	66.7	26.7

Table 10 (Continued)

Item	Number Responding	Average Response	Percent SD (1)	D (2)	U (3)	A (4)	SA (5)
8. After the inservice training sessions, I felt prepared to assist children learn to read.	15	3.7	0.0	20.0	13.3	46.7	20.0
9. I shared information from the inservice training sessions with the kindergarten teacher(s) to whom I am assigned.	15	4.5	0.0	0.0	0.0	46.7	53.3
10. The teacher(s) I work with has shared ideas and shown me ways to become better at helping pupils learn to read.	15	4.3	0.0	6.7	6.7	40.0	46.7
11. I used the revised Resource Guide and Handbook on at least a weekly basis.	15	3.5	6.7	13.3	6.7	66.7	6.7
12. The revised Resource Guide and Handbook is very useful to me in the instruction of reading and language arts skills.	15	3.8	0.0	13.3	20.0	40.0	26.7
13. Overall, the revised Resource Guide and Handbook was very adequate in helping me do my job.	15	3.8	0.0	20.0	6.7	46.7	26.7
14. The revisions made to the Resource Guide and Handbook really improved its instructional usefulness.	15	3.5	0.0	13.3	26.7	53.3	6.7

First Grade Component

The Pupil Census Form data indicated that 1780 pupils were served by the project during the 1987-88 school year. The average number of pupils served during the year by the 90.5 aides was 19.7. The average daily membership (ADM) in the first grade component was 1542.8. The average hours of instruction per week was 2.9.

First priority for pupil selection was given to underachieving pupils not served by Chapter 1 CLEAR. Second priority for selection was at the option of the classroom teacher to include underachievers who were also being served in Chapter 1 CLEAR. Of the 1780 pupils who were served by the program, 262 (14.7%) were also served in Chapter 1 CLEAR. The information collected on the Pupil Census Form is summarized in Table 11. Out of a total of 1780 pupils served by the project, 1118 (62.8%) met the attendance criterion by attending 80% (97) of 121 project days. The pretest-posttest analysis included 991 pupils of the 1118 pupils who took both a pretest and posttest and meet the 80% attendance criterion.

First grade pupils were administered the Vocabulary and Oral Comprehension tests of the Comprehensive Tests of Basic Skills, Level B, in the Fall and the Vocabulary and Reading Comprehension tests, Level C, in the Spring. A comparison could not be made between the Oral and Reading Comprehension tests. Therefore, analyses were based on a comparison of the pretest-posttest Total Reading score.

The analysis of pretest-posttest achievement data for percentile minimums, maximums, medians and standard deviations is shown in Table 12. The median percentile for the pretest was 17; while the median percentile for the posttest was 24.

Table 13 presents pretest and posttest data in terms of grade equivalents. The average grade equivalent for the pretest was 0.4. Grade equivalents on the posttest ranged from 0.6 to 3.5 with an average of 1.4.

The presentation of achievement data thus far included results from the analysis of percentiles and grade equivalents. Grade equivalents are not equal units of measurement and fail to indicate where pupils stand in relation to their peer group. Grade equivalents can provide only a limited interpretation of achievement data. Percentiles provide comparative information but are not equal units of measurement. Caution is advised in drawing conclusions about program impact from any of the scores above. Normal curve equivalents (NCEs) are generally considered to provide the truest indication of student growth in achievement, since they provide comparative information in equal units of measurement.

Data for NCEs are presented in Table 14. The analysis of the pretest-posttest achievement data for the 991 pupils meeting the 80% attendance criterion and who took both the pretest and posttest indicated an average growth of 3.9 NCEs for the 6.1 month period. Objective 1.2 was not achieved for the first grade component of the Instructional Aide Program. However, it should be kept in mind that NCEs are based on percentiles, which compare the pupil's performance in relation to the general population. For a pupil's NCE score to remain the same at posttest as at pretest does not denote a lack of absolute progress; on the contrary it means that the pupil has maintained the same relative position in terms of the general population. Even a small gain in NCEs indicates a positive change from the pupil's original standing. This becomes evident when we note that ample progress was made in regard to grade equivalent scores.

Table 15 contains data related to the changes in NCE scores for three ranges: (a) no improvement in NCE scores (0.0 or less), (b) some improvement in NCE scores (0.1 to 6.9), and (c) substantial improvement in NCE scores (7.0 or more). The data indicate that 587 (59.2%) pupils made gains in NCE scores. More specifically, 434 (43.8%) made substantial improvement and 153 (15.4%) made some improvement in NCE scores, while 404 pupils (40.8% of the evaluation sample) made no improvement, as evidenced by a gain of 0.0 or decrease in NCE score.

Table 11
Number of Pupils Served, Averages for Days of Enrollment, Days of Attendance, Daily Membership and Hours of Instruction Per Week, and Pupils Attending 80% of Days
Reported by Grade Level

Grade	Pupils Served	Girls	Boys	Average Days of Enrollment	Average Days of Attendance	Average Daily Membership	Average Hrs. of Inst. Per Pupil Per Week	Pupils Attending 80% of Days
1	1780	778	1002	104.9	92.2	1542.8	2.9	1118

Table 12
Minimum, Maximum, Median, and Standard Deviation of the Pretest and Posttest Percentiles
Reported by Grade Level

Grade	Number of Pupils	Pretest Min.	Pretest Max.	Pretest Median Percentile	Pretest Standard Deviation	Posttest Min.	Posttest Max.	Posttest Median Percentile	Posttest Standard Deviation
1	991	1	96	17	19.3	1	96	24	20.2

EVALSRVCS/P518/RPTFAID88

Table 13

Minimum, Maximum, Average, and Standard Deviation of the Pretest and Posttest Grade Equivalents (GE)

		Pretest				Posttest			
Grade	Number of Pupils	Min.	Max.	Average GE	Standard Deviation	Min.	Max.	Average GE	Standard Deviation
1	991	0	3	0.4	0.5	0.6	3.5	1.4	0.4

Table 14

Minimum, Maximum, Average, and Standard Deviation of the Pretest and Posttest Normal Curve Equivalents (NCE) Reported by Grade Level

		Pretest				Posttest				
Grade	Number of Pupils	Min.	Max.	Average NCE	Standard Deviation	Min.	Max.	Average NCE	Standard Deviation	Average Change
1	991	1	87	30.6	15.6	1	87	34.5	15.8	3.9

Table 15
Changes in Normal Curve Equivalents (NCE) Scores
for First Grade Pupils
1986-87

	Pupils in Sample	No Improvement (0.0 or less)	Some Improvement (0.1 to 6.9)	Substantial Improvement (7.0 or more)
Number of Pupils		404	153	434
% of Pupils	991	40.8%	15.4%	43.8%

EVALSRVCS/P518/RPTFAID88

In May, the teachers participating in the program were surveyed to evaluate their perceptions of the impact of the services of the aides on first grade pupils' reading skills. Of the 181 teachers, 135 (74.6%) returned the survey. The first part of the survey asked the teachers to respond to eight statements concerning the performance of the instructional aide as well as the adequacy of the test instrument administered. The second part of the survey asked the teachers to respond to 12 statements concerning the degree of progress by target pupils which could be attributed to the efforts of the instructional aide. The third part of the survey asked teachers to indicate the number of pupils retained and the number that might have been retained this year because of reading deficiencies were it not for the services of the instructional aide. The teachers responded to the items in Part 1 and 2 by using a 5-point rating scale of (1) Strongly Disagree, (2) Disagree, (3) Undecided, (4) Agree, and (5) Strongly Agree. Tables 16, 17, and 18 contain a summary of responses to the three parts of the survey. The teachers' agreement with item 1 is an indication that Criterion 2.1 specified in Objective 2.0 was achieved. While the criterion was achieved, as indicated by teacher ratings, normative data indicate that achievement did not occur as anticipated.

Of the teachers responding to item 6, 53.3% (71) indicated that the Test was not an accurate measure of pupil achievement; 20.3% (27) teachers were undecided. Given the problem experienced with the pretest level of the test utilized during the 1984-85 school year, some explanation is in order regarding the tests currently employed. The CTBS test series was selected in the 1984-85 school year by the Columbus Schools' test selection committee. At that time it was perceived to be the best series that matched the district's Course of Study for each grade. During the 1984-85 school year a problem was apparent with Level C at the first grade, particularly with the developmentally slower pupil at pretest time. Considering the differences between fall testing and spring testing, it was considered that Level B would be a better match for beginning first-graders, while Level C was retained as an appropriate measure for first-graders at the end of the school year. Both test levels were better suited to measure the knowledge at each test administration time. The test Level B at pretest and test Level C at posttest were considered more appropriate measures and better discriminators of first grade pupil achievement. Responses to item 7 indicated that test instructions were adequate. Responses to item 8 indicated that most teachers felt that the time allotted for testing was adequate.

Overall, 83.9% of the teachers attributed pupil progress to the instructional aide as indicated by positive ratings of the 12 skill areas which are listed in Table 17. The average rating was 4.1 (3 is Undecided and 4 Agreement).

On the average 91.7% of the teachers agreed that aides made a significant contribution to pupils in the areas of recognizing basal words from the Ginn reading series. Of the 135 teachers responding, 91.1% agreed that aides also made a significant contribution in helping pupils to write the lower and upper case alphabet.

Teacher responses to part three of the survey, Table 18, indicated that 263 pupils were retained this year and that a total of 358 additional pupils might have been retained this year because of reading deficiencies were it not for the services of the instructional aide as judged by those teachers responding. The data indicated that an average 2.9 pupils per teacher were probably promoted and were not retained as a result of having additional instructional support provided by the instructional aide.

While data indicated Criterion 2.1 specified in Objective 2.0 was achieved, one item in Part 2 would seem to indicate that the pupil progress was not as great as anticipated. Teacher ratings would appear to highlight this area of concern for future consideration in program planning (i.e., participating in imaginative situations). Concern was also expressed regarding the adequacy of the CTBS test as an accurate measure of reading achievement.

In May 1988, the Instructional Assessment Instrument was sent to the first grade instructional aides. The purpose of this instrument was to assess the value of the inservice after the aides had an opportunity to apply the inservice training and materials in the classroom. The aides were asked to respond to 14 statements by circling (1) Strongly Disagree, (2) Disagree, (3) Undecided, (4) Agree, and (5) Strongly Agree. The instrument was returned by 112 (92.6%) of 121 aides surveyed.

The evidence outlined in Table 19 shows that Criterion 3.2 was met. All of the average responses were 4.0 or more (4.0 is Agree). The instructional aides obviously perceived the inservice training sessions as being helpful in the classroom setting, particularly in the adequacy and usefulness of the revised Resource Guide and Handbook.

Table 16
Average Response and Percent of Responses for
Part 1 of the Classroom
Teacher Survey (First Grade)

Item	Number Responding	Average Response	Percent SD (1)	D (2)	U (3)	A (4)	SA (5)
1. The overall reading and language arts abilities of pupils in the target group improved significantly as a result of interacting with the instructional aide.	133	4.2	3.8	4.5	9.8	36.8	45.1
2. The instructional materials made by the aide were useful in working with children.	133	4.3	2.3	4.5	5.3	34.6	53.4
3. The instructional aide has a basic understanding of how beginning reading and language arts are taught.	134	4.3	3.0	3.7	3.7	36.6	53.0
4. The Resource Guide and Handbook developed for the program has been of great value to your instructional aide in helping pupils.	132	4.1	1.5	5.3	14.4	41.7	37.1
5. During reading and language arts activities, the instructional aide relates well to the pupils.	135	4.5	2.2	1.5	4.4	31.1	60.7
6. The CTBS test instrument seemed to be an adequate measure of pupil achievement.	133	2.4	33.8	19.5	20.3	23.3	3.0
7. The instructions given to complete the CTBS testing process were adequate.	134	3.9	0.7	4.4	6.7	71.6	16.6
8. The time allotted for testing was adequate.	135	3.9	3.0	5.9	7.4	66.7	17.0

Table 17
Average Response and Percent of Responses for
Part 2 of the Classroom
Teacher Survey (First Grade)

Items	Number Responding	Average Response	Percent SD (1)	D (2)	U (3)	A (4)	SA (5)
1. Relate and share experiences and stories in correct sequence	133	4.0	2.3	6.0	6.8	57.9	27.1
2. Participate in imaginative situations: pantomime, puppetry, role playing, etc.	132	3.5	6.8	12.9	15.9	50.0	14.4
3. Write lower and upper case alphabet	135	4.2	2.2	5.2	1.5	51.1	40.0
4. Write numerals correctly	135	3.8	3.0	11.9	8.1	51.9	25.2
5. Form and space letters and words correctly	134	4.1	2.2	5.2	8.2	53.0	31.3
6. Use manuscript to copy words and sentences correctly	133	4.1	2.3	6.0	4.5	53.4	33.8
7. Match words with pictures	133	4.2	3.0	3.0	6.0	48.1	39.8
8. Recognize that words may name people, places, animals, and things	135	4.0	4.4	5.2	9.6	44.4	36.3
9. Recognize that words may be grouped to express a complete thought	135	4.1	2.2	6.7	8.9	43.7	38.5
10. Identify certain groups of words or sentences	133	4.2	2.3	3.0	6.0	48.9	39.8
11. Listen and respond to stories, poems, plays, and other literary forms	135	4.2	3.0	3.7	6.7	41.5	45.2
12. Recognize basal words from the Ginn reading series	133	4.3	0.8	2.3	5.3	46.6	45.1

Table 18
Average Response and Percent of Responses to
Part 3 of the Classroom
Teacher Survey (First Grade)

Item	Number of Teachers	Number of Pupils	Average Response
1. How many pupils are you retaining this year?	133	263	1.9
2. How many additional pupils might you have retained were it not for the services of the instructional aide?	124	358	2.9

Table 19
Average Response and Percent of Responses for
Aides' Perceptions of the Training Sessions (First Grade)

Item	Number Responding	Average Response	Percent SD (1)	D (2)	U (3)	A (4)	SA (5)
1. As a result of the in-service training sessions, I have a greater understanding of how first graders learn to read.	112	4.4	0.0	0.0	2.7	51.8	45.5
2. The inservice training sessions have helped me to effectively participate in the reading and language arts activities which are conducted in a first grade classroom.	111	4.4	0.0	0.0	1.8	57.7	40.5
3. As a result of the in-service training sessions, I have a greater understanding of the concerns and responsibilities that a first grade teacher has toward the instruction of reading, and language arts.	112	4.3	0.0	1.8	2.7	56.3	39.3
4. The topics presented in the inservice training sessions were necessary to help define and support my role in the classroom.	109	4.3	0.0	0.9	3.7	55.0	40.4
5. I understand how the Ginn reading series is to be used at the first grade level.	111	4.3	0.0	0.0	7.2	57.7	35.1
6. During the inservice training sessions, I learned many activities and instructional methods which may be used in the teaching of reading and language arts with first grade pupils.	112	4.4	0.0	0.0	2.7	53.6	43.8

Table 19 (Continued)

Item	Number Responding	Average Response	Percent SD (1)	D (2)	U (3)	A (4)	SA (5)
7. These inservice sessions have made me aware of the instructional resources made available by our school system.	112	4.4	0.0	0.9	1.8	55.4	42.0
8. After the inservice training session, I felt prepared to help children develop and use reading and language arts skills.	112	4.4	0.0	0.0	6.3	44.6	49.1
9. I shared information from the inservice training sessions with the first grade teacher(s) to whom I am assigned.	112	4.4	0.0	0.9	0.0	58.9	40.2
10. The teacher(s) I work with has shared ideas and shown me ways to become better at helping pupils develop and use reading and language arts skills.	111	4.3	0.0	4.5	5.4	42.3	47.7
11. I used the revised Resource Guide and Handbook on at least a weekly basis.	111	4.4	0.0	5.4	1.8	40.5	52.3
12. The revised Resource Guide and Handbook is very useful to me in the instruction off reading and language arts skills.	112	4.6	0.0	0.0	3.6	35.7	60.7
13. Overall, the revised Resource Guide and Handbook was very adequate in helping me do my job.	112	4.5	0.0	0.0	4.5	37.5	58.0
14. The revisions made to the Resource Guide and Handbook really improved its instructional usefulness.	112	4.4	0.0	0.0	11.6	35.7	52.7

In an effort to obtain additional information regarding the reading progress of pupils, the Student Assessment Form (SAF) was developed during the 1987-88 school year and distributed in May to all first grade aides. The aide with the assistance of the classroom teacher was asked to respond to five items for each pupil listed and included the following: the reading series and/or program employed for instruction, fall and spring reading levels, and the promotion and Chapter 1 service status. Student assessment information was collected for 1521 program eligible pupils. The data indicated that 1461 (96.1%) pupils received instruction using the reading series adopted by the district (i.e., Ginn). Of this number, 1261 (86.3%) met the program criteria for service and are considered in these analyses. Tables 20 and 21 contain summaries of the results.

Table 20 presents the distribution of the reading level status of 1258 pupils in the fall and the spring. The data indicated that 1225 (97.4%) of the pupils progressed beyond the reading readiness level. The school system generally considers first grade pupils having completed the third preprimer as eligible for promotion. The data also indicated 422 (33.5%) of the pupils who read at the readiness level in the fall were still reading in one of the three preprimers in the spring. Those first grade pupils reading beyond the third preprimer level were considered to be reading closer to grade level and eligible for promotion to second grade. Of the 1258 pupils, 803 (63.8%) pupils were able to reach this level of attainment.

In Table 21, the distribution of reading level growth is summarized. Of the 1258 pupils in the analysis, 1193 (94.7%) showed growth of two or more reading levels, and 863 (68.5%) showed growth of four or more reading levels.

Table 20

Distribution of Fall and Spring Reading Levels
for Program Eligible First Grade Pupils
Using the District Adopted Reading Series

Basal Reading Level	Fall		Spring	
	Frequency	Percent	Frequency	Percent
Below Reading Readiness	260	20.6	9	.7
Reading Readiness	1001	79.4	24	1.9
First Pre-primer			64	5.1
Second Pre-primer			103	8.2
Third Pre-primer			255	20.2
Beyond Third Pre-primer			803	63.8

Table 21

Distribution of Reading Level Growth
for Program Eligible First Grade Pupils
Using the District Adopted Reading Series

Categories of Reading Level Growth	Frequency	Percent
No Level	17	1.3
One Level	48	3.8
Two Levels	89	7.1
Three Levels	241	19.1
Four Levels	627	49.7
Five Levels or More	236	18.8

Summary/Recommendations

Kindergarten Component

The kindergarten component of the Instructional Aide Program provided an educational program for kindergarten pupils who were underachievers in reading. The program was conducted in 10 schools with an equivalent of 14 aides serving 276 pupils and 16 teachers. The instructional aides attended 15 half-day inservice training sessions during the school year with emphasis on the whole language approach to instruction.

A review of the data presented herein indicates that (except for one criterion) all program objectives were achieved for the 1987-88 school year. There is evidence which indicates that all the criteria specified in the evaluation design except Criterion 3.2 were achieved. In particular, an analysis of the pretest-posttest achievement data for the 143 pupils who met the 80% attendance criterion and who took both the pretest and posttest showed an average NCE gain of 3.2 per month for the 6.1 month project period. The data indicate that target pupils' achievement of some specific skills, which were to be attributable to the instructional aides' efforts, were achieved and exceeded the degree anticipated. Teacher ratings on the survey highlighted areas of specific concern for future program consideration (i.e., the perceived adequacy of the CTBS as an accurate measure of reading, aides participation in imaginative situations, and the use of the Resource Guide and Handbook). Criterion 3.2 called for evidence that 80% of the aides would perceive the content of the training sessions as helpful. Overall the data indicated that while the criterion was not attained, 74.8% found the inservice meaningful and communication between the aide and the classroom teacher was successful. It should be noted, the revised first grade Resource Guide and Handbook was utilized for instructional purposes in the joint kindergarten/first grade training sessions periodically throughout the year. The use of the handbook was based on the assumption that information shared regarding the whole language approach to instruction was applicable to all in attendance. Process data indicated aides did not perceive the content of the training sessions to be as helpful in the kindergarten classroom as expected.

Considering the success of the present program in achieving the prescribed objectives for the 1987-88 school year, as well as the basic importance of reading to the future academic success of pupils, the present program should be continued. The training of aides, however, should continue to be both intensive and extensive with inservice training sessions provided early in the school year to strengthen instructional skills. These sessions should be directed to the kindergarten level and should incorporate sound developmental principals of learning, particularly in those areas highlighted in the Teacher Survey. The roles of the instructional team members need to be clearly defined with emphasis upon joint planning and communication.

First Grade Component

The first grade component of the Instructional Aide Program continued to provide an educational program for first grade pupils who were underachievers in reading. The program was conducted in 57 schools with the equivalent of 90.5 aides serving 1780 pupils and 181 teachers. The instructional aides attended a series of 15 half-day inservice training sessions in the fall. These sessions focused on a number of topics which were designed to increase the effectiveness of each aide in the classroom with emphasis on the whole language approach to instruction.

A review of the data presented herein indicates that all the objectives of the program except one (Objective 1.2) were achieved for the 1987-88 school year. Objective 1.2 called for the achievement of 1.0 NCE for each month of the program. The data indicated that target pupils, on the average, progressed 3.9 NCEs for the entire 6.1 month period. However, it should be kept in mind that NCEs are based on percentiles which compare the pupil's performance in relation to the general population. For a pupil's NCE score to remain the same at posttest as at pretest does not denote a lack of absolute progress; on the contrary, it means that the pupil has maintained the same relative position in terms of the general population. Even a small gain in NCE's indicates an advancement from the pupil's original standing. The data indicated, in terms of NCE change scores, that more than half of the pupils made gains from their original standing. The tests from which NRT data were collected were presumed to reflect the varying knowledge base of pupils in the fall and spring. Comparative analysis of the different levels of tests utilized may not reflect pupil achievement to the degree desired, given the developmental stage of pupils at the times of test administration. While the level of achievement did not occur to the degree anticipated, teacher ratings would appear to indicate that the reading skills of target pupils were substantially enhanced through direct interaction with the instructional aide. In addition, an assessment of basal reading level growth showed that more than two-thirds of pupils gained four or more basal levels. The overall success of this program reaffirms that instructional aides with appropriate training and directed classroom service may be effectively employed by first-grade teachers to improve reading skills of underachieving pupils.

Considering the basic importance of reading skills to the educational process, as well as the major role that a lack of such skills play in inhibiting the progress of underachieving pupils, efforts to improve the effectiveness of reading instruction should be encouraged. The present program, having demonstrated effectiveness by improving the reading skills of underachieving pupils, showing considerable improvement over last year, should be continued. The training of aides, however, should be both intensive and

extensive with inservice training sessions provided early in the school year in order to strengthen instructional and motivational skills that would result in growth in reading comprehension. The roles of the instructional team members need to be clearly defined with emphasis upon joint planning and communication.

Evaluation data and information obtained through the evaluation process suggested that the success of the program could be increased if action was taken on the following items.

1. When and where possible, the project evaluator and coordinators should increase project classroom visitation to ascertain the degree of program implementation and to answer questions regarding the program and its evaluation. These visits would provide valuable feedback regarding the status of program goals, objectives, implementation of instructional activities, and evaluation procedures.

2. Provide teachers and the aides with a clearer definition of the instructional objectives and program goals that the aides should be working toward in the classroom, especially in the area of improving reading comprehension as appropriate at both grade levels. Where possible, clarify the function of the classroom teacher and aide as members of the instructional team.

3. Provide an inservice program to broaden the base of instructional skills as reflected in the survey results (i.e., utilization of the Resource Guide and Handbook, broaden base of understanding regarding norm-referenced testing, and present materials in imaginative situations), reinforce communication skills acquired, and enhance classroom planning. The improvement of reading comprehension as related to the whole language approach to instruction should be a major focus of the inservice program.

4. Measures should continue to be taken to insure the stability of a trained instructional aide staff. While the turnover rate of instructional aides has been reduced, there is still a need to provide trained aides for positions vacated throughout the school year. Maintaining trained and competent aides would enhance program achievement and continuity.

5. From visitation and discussion with project personnel, there were probably more pupils served during the 1987-88 school year than what the data indicate. Collection of data has improved over the years, but there is still a need for more accurate accounting. When and where possible, the project evaluator should be provided the opportunity, as needed, to reacquaint aides with appropriate evaluation procedures at the close of inservice meetings. More input would enhance the collection of demographic data on pupils served and encourage the documentation of records for each pupil served regardless of service duration.

References

CTB/McGraw-Hill Staffwriters, Comprehensive Test of Basic Skills. Monterey, California: CTB/McGraw-Hill, 1981.

Appendix A

Kindergarten Component

COLUMBUS PUBLIC SCHOOLS - Columbus, Ohio PUPIL CENSUS FORM

LAST NAME | FIRST NAME | M I | SEX | TEACHER NUMBER

SCHOOL | H R | GRADE

USE A NUMBER 2 PENCIL. ERASE COMPLETELY WHEN MAKING CORRECTIONS.

1. WAS THIS A NON-ENGLISH SPEAKING STUDENT? (SEE MEMO).
   YES ★ NO ★

2. WAS THIS PUPIL SERVED BY A CHAPTER 1 PROGRAM?
   YES ★ NO ★

TEACHER NUMBER | PROGRAM CODE

STUDENT | SCHOOL | GRADE | SEX

MALE ○
FEMALE ○

TOTAL DAYS OF PROGRAM ENROLLMENT 1 2 3 | TOTAL DAYS OF PROGRAM ATTENDANCE 4 5 6 | HOURS OF INSTRUCTION PER WEEK

NCS Trans Optr. 08 8153 32

40

41

Columbus Public Schools
Instructional Aide Program (Kindergarten)
1987-88

CLASSROOM TEACHER SURVEY

The Classroom Teacher Survey of the Instructional Aide Program is designed to evaluate your perceptions of the overall aide program. Please complete the following survey and return it by school mail no later than May 10, 1988. Thank you.

Part 1. Listed below are statements regarding the Instructional Aide Program. Please circle the one response that best describes your feelings about each statement. Responses are (SA) Strongly Agree, (A) Agreement, (U) are Undecided, (D) Disagree or (SD) Strongly Disagree.

1.	The overall readiness to read of pupils in the target group has improved significantly as a direct result of interacting with the instructional aide.	SA	A	U	D	SD
2.	The instructional materials made by the aide were useful in working with children.	SA	A	U	D	SD
3.	The instructional aide has a basic understanding of how kindergarten pupils begin to read.	SA	A	U	D	SD
4.	The revised Resource Guide and Handbook developed for the program has been of great value to the aide in helping pupils.	SA	A	U	D	SD
5.	During readiness activities, the instructional aide relates well to the pupils.	SA	A	U	D	SD
6.	The CTBS instrument seemed to be an adequate measure of reading readiness.	SA	A	U	D	SD
7.	The instructions given to complete the CTBS testing process were adequate.	SA	A	U	D	SD
8.	The time alloted for testing was adequate.	SA	A	U	D	SD

Part 2. Please indicate the degree to which progress was experienced by target group pupils in reading and language arts which can be attributed to the efforts of the instructional aide. Please circle the one response that best describes your feelings about each statement. Responses are (SA) Strongly Agree, (A) Agree, (U) are Undecided, (D) Disagree or (SD) Strongly Disagree.

As the result of the efforts of the instructional aide, target group pupils are better able to:

1.	Relate and share experiences and stories in correct sequence	SA	A	U	D	SD
2.	Participate in imaginative situations: pantomime, puppetry, role playing, etc.	SA	A	U	D	SD
3.	Write the letters of the alphabet	SA	A	U	D	SD
4.	Write their names and numbers (1-20)	SA	A	U	D	SD
5.	Deliver oral messages correctly	SA	A	U	D	SD
6.	Listen and respond to stories, poems, plays and other literary forms	SA	A	U	D	SD
7.	Recall details, stories	SA	A	U	D	SD
8.	Differentiate likes, similarities shapes, sizes, facts and fantasies	SA	A	U	D	SD
9.	Know the sounds of single consonants	SA	A	U	D	SD
10.	Match words to pictures	SA	A	U	D	SD
11.	Understand the main idea	SA	A	U	D	SD
12.	Recognize basal words from the Ginn reading series	SA	A	U	D	SD

Part 3. Listed below are questions regarding the impact of the instructional aide on the progress of target pupils. Please indicate your response by recording the appropriate number.

1. How many <u>instructional aide program target pupils</u> are you retaining this year because of reading deficiencies?_____

2. How many additional <u>instructional aide program target pupils might you have retained</u>, because of reading deficiencies, were it not for the services of the instructional aide?_____

Columbus Public Schools
DPPF Instructional Aide Program
1987-88

INSTRUCTIONAL AIDE PROGRAM TRAINING SURVEY

Date: _____
(month, day, year)

Component: ____Kdg. ___1st Grade

Subject Area(s)_____

Presenter(s)_____

Please check ( ) one:

___Principal
___Teacher
___Instructional Aide

Please check ( ) one:

Years of Experience in Inst. Aide Prog.

___(1st Year)
___(2nd Year)
___(3rd Year)
___(More)

Instructions: Answer the question below by putting a check ( ) in the space that best shows your opinion.

1. The content presented at today's session was:

   a. very informative ___
      informative ___
      not informative ___

   b. very interesting ___
      interesting ___
      not very interesting ___

   c. very worthwhile ___
      worthwhile ___
      not worthwhile ___

2. Was the length of the session adequate for presentation of the subject area?

   Yes____ No____ Explain_____

3. Was there sufficient opportunity for questions and answers?

   Yes____ No____ Explain_____

   Were questions answered? Yes___ No___ Explain_____

4. What changes do you suggest for improving today's session?_____

5. What subject areas do you recommend for future sessions?_____

EVALSRVCS/P518/FRMAIDSV
REVISED 08/31/87

Columbus Public Schools
Instructional Aide Program (Kindergarten)
1987-88

INSTRUCTIONAL AIDE ASSESSMENT INSTRUMENT

The Instructional Aide Assessment of the Kindergarten Instructional Aide Program is designed to evaluate your perceptions of this program. Please complete the following assessment and return it by school mail no later than May 10, 1988. Thank you.

Part 1. Please respond to the following statements by circling one response which best indicates whether you (SA) Strongly Agree, (A) Agree, (U) are Undecided, (D) Disagree, or (SD) Strongly Disagree with each statement.

1. As a result of the inservice training sessions, I have a greater understanding of how kindergarteners get ready to read.	SA	A	U	D	SD
2. The inservice training sessions have helped me to effectively participate in the reading readiness activities which are conducted in a kindergarten classroom.	SA	A	U	D	SD
3. As a result of the inservice training sessions, I have a better understanding of the concerns and responsibilities that a kindergarten teacher has toward the beginning instruction of reading.	SA	A	U	D	SD
4. The topics presented in the inservice training sessions were helpful to me in understanding my job in the classroom.	SA	A	U	D	SD
5. I understand how the Ginn reading series is to be used at the kindergarten level.	SA	A	U	D	SD
6. During the inservice training sessions, I learned many activities and instructional methods which may be used in the instruction of reading with kindergarten pupils.	SA	A	U	D	SD
7. These inservice sessions have made me aware of the instructional resources made available by our school system.	SA	A	U	D	SD
8. After the inservice training session, I felt prepared to help children in learning to read.	SA	A	U	D	SD

9. I shared information from the in-service training sessions with the kindergarten teacher(s) to whom I am assigned. SA A U D SD

10. The teacher(s) I work with has shared ideas and shown me ways to become better at helping pupils learn to read. SA A U D SD

11. I used the revised Resource Guide and Handbook on at least a weekly basis. SA A U D SD

12. The revised Resource Guide and Handbook is very useful to me in the instruction of reading and language arts skills. SA A U D SD

13. Overall, the revised Resource Guide and Handbook was very adequate in helping me do my job. SA A U D SD

14 The revisions made to the Resource Guide and Handbook really improved its instructional usefulness. SA A U D SD

Part 2. As required by the Department of Education, for the State of Ohio, please indicate below the average number of sessions you work with target students per week; the average number of students, where appropriate, and number of minutes per session. A session is defined as a block of time in which you provide direct service to target pupils, individually or in a small group. The calculation of the average number of sessions and average number of minutes pupils are served is based upon a typical week in which instruction was provided by the categories listed below.

	AVERAGE		
	Number of Sessions Per Week	Number of Students Per Session	Number of Minutes Per Session
1. Individualized Instruction			
a. Writing Skills	_____	N/A	_____
b. Reading	_____	N/A	_____
2. Small Group Instruction			
a. Writing Skills	_____	_____	_____
b. Reading	_____	_____	_____

Appendix B

First Grade Component

Columbus Public Schools
Instructional Aide Program (First Grade)
1987-88

CLASSROOM TEACHER SURVEY

The Classroom Teacher Survey of the Instructional Aide Program is designed to evaluate your perceptions of the overall aide program. Please complete the following survey and return it by school mail no later than May 10, 1988. Thank you.

Part 1. Listed below are statements regarding the Instructional Aide Program. Please circle the one response that best describes your feelings about each statement. Responses are (SA) Strongly Agree, (A) Agree, (U) are Undecided, (D) Disagree or (SD) Strongly Disagree.

1.	The overall reading and language arts abilities of pupils in the target group improved significantly as a result of interacting with the instructional aides.	SA	A	U	D	SD
2.	The instructional materials made by the aide were useful in working with children.	SA	A	U	D	SD
3.	The instructional aide has a basic understanding of how beginning reading and language arts are taught.	SA	A	U	D	SD
4.	The revised Resource Guide and Handbook developed for the program has been of great value to the instructional aide in helping pupils.	SA	A	U	D	SD
5.	During reading and language arts activities, the instructional aide relates well to the pupils.	SA	A	U	D	SD
6.	The CTBS instrument seemed to be an adequate measure of pupil achievement.	SA	A	U	D	SD
7.	The instructions given to complete the CTBS testing process were adequate.	SA	A	U	D	SD
8.	The time alloted for testing was adequate.	SA	A	U	D	SD

Part 2. Please indicate the degree to which progress was experienced by target group pupils in reading and language arts which can be attributed to the efforts of the instructional aide. Please circle the one response that best describes your feelings about each statement. Responses are (SA) Strongly Agree, (A) Agree, (U) are Undecided, (D) Disagree or (SD) Strongly Disagree.

As the result of the efforts of the instructional aide, target group pupils are better able to:

1. Relate and share experiences and stories in correct sequence	SA	A	U	D	SD
2. Participate in imaginative situations: pantomime, puppetry, role playing, etc.	SA	A	U	D	SD
3. Write lower and upper case alphabet	SA	A	U	D	SD
4. Write numerals correctly	SA	A	U	D	SD
5. Form and space letters and words correctly	SA	A	U	D	SD
6. Use manuscript to copy words and sentences correctly	SA	A	U	D	SD
7. Match words with pictures	SA	A	U	D	SD
8. Recognize that words may name people, places, animals, and things	SA	A	U	D	SD
9. Recognize that words may be grouped to express a complete thought	SA	A	U	D	SD
10. Identify certain groups of words or sentences	SA	A	U	D	SD
11. Listen and respond to stories, poems, plays, and other literary forms	SA	A	U	D	SD
12. Recognize basal words from the Ginn reading series	SA	A	U	D	SD

Part 3. Listed below are questions regarding the impact of the instructional aide on the progress of target pupils. Please indicate your response by recording the appropriate number.

1. How many instructional aide program target pupils are you retaining this year because of reading deficiencies? _____

2. How many additional instructional aide program target pupils might you have retained, because of reading deficiencies, were it not for the services of the instructional aide?_____

Columbus Public Schools
Instructional Aide Program (First Grade)
1987-88

INSTRUCTIONAL AIDE ASSESSMENT INSTRUMENT

The Instructional Aide Assessment of the First Grade Instructional Aide Program is designed to evaluate your perceptions of this program. Please complete the following assessment and return it by school mail no later than May 10, 1988. Thank you.

Part 1. Please respond to the following statements by circling one response which best indicates whether you (SA) Strongly Agree, (A) Agree, (U) are Undecided, (D) Disagree or (SD) Strongly Disagree with each statement.

1. As a result of the inservice training sessions, I have a greater understanding of how first graders learn to read.	SA	A	U	D	SD
2. The inservice training sessions have helped me to effectively participate in the reading and language arts activities which are conducted in a first grade classroom.	SA	A	U	D	SD
3. As a result of the inservice training sessions, I have a greater understanding of the concerns and responsibilities that a first grade teacher has toward the instruction of reading and language arts.	SA	A	U	D	SD
4. The topics presented in the inservice training sessions were necessary to help define and support my role in the classroom.	SA	A	U	D	SD
5. I understand how the Ginn reading series is to be used at the first grade level.	SA	A	U	D	SD
6. During the inservice training sessions, I learned many activities and instructional methods which may be used in the teaching of reading and language arts with first grade pupils.	SA	A	U	D	SD
7. These inservice sessions have made me aware of the instructional resources made available by our school system.	SA	A	U	D	SD
8. After the inservice training session, I felt prepared to help children develop and use reading and language arts skills.	SA	A	U	D	SD

9. I shared information from the inservice training sessions with the first grade teacher(s) to whom I am assigned.	SA	A	U	D	SD
10. The teacher(s) I work with has shared ideas and shown me ways to become better at helping pupils develop and use reading and language arts skills.	SA	A	U	D	SD
11. I used the revised Resource Guide and Handbook on at least a weekly basis.	SA	A	U	D	SD
12. The revised Resource Guide and Handbook was very useful to me in the instruction of reading and language arts skills.	SA	A	U	D	SD
13. Overall, the revised Resource Guide and Handbook was very adequate in helping me do my job.	SA	A	U	D	SD
14. The revisions made to the Resource Guide and Handbook really improved its instructional usefulness.	SA	A	U	D	SD

Part 2. As required by the Department of Education, for the State of Ohio, please indicate below the average number of sessions you work with target students per week; the average number of students, where appropriate, and number of minutes per session. A session is defined as a block of time in which you provide direct service to target pupils, individually or in a small group. The calculation of the average number of sessions and average number of minutes pupils are served is based upon a typical week in which instruction was provided by the categories listed below.

	AVERAGE		
	Number of Sessions Per Week	Number of Students Per Session	Number of Minutes Per Session
1. Individualized Instruction			
a. Writing Skills	_____	N/A	_____
b. Reading	_____	N/A	_____
2. Small Group Instruction			
a. Writing Skills	_____	_____	_____
b. Reading	_____	_____	_____

04 MAY 88 RUN DATE
16:54:19 RUN TIME

DPPF
INSTRUCTIONAL AIDE PROGRAM

STUDENT ASSESSMENT FORM

FIRST GRADE
1987-1988

TEACHER
SCHOOL ( )

(1) NAME	(2) STUDENT NUMBER	(3) BIRTHDAY	(4) READING SERIES OR PROGRAM (1-4)	(5) FALL GINN READING LEVEL (0-1)	(6) SPRING GINN READING LEVEL (0-8)	(7) TO BE PROMOTED (1=YES; 2=NO)	(8) CHAPTER 1 SERVED (1=YES; 2=NO)
			---	---	---	---	---
			---	---	---	---	---
			---	---	---	---	---
			---	---	---	---	---
			---	---	---	---	---
			---	---	---	---	---

READING SERIES OR PROGRAM:
1 = GINN BASAL SERIES (ADOPTED SERIES)
2 = ALTERNATIVE READING PROGRAM
3 = LITERATURE BASED (NO BASAL)
4 = OTHER, SPECIFY

GINN READING LEVEL:
0 = BELOW READING READINESS
1 = (R) ONE POTATO, TWO
2 = (PP1) LITTLE DOG LAUGHED
3 = (PP2) FISH AND NOT FISH
4 = (PP3) INSIDE MY HAT
5 = (P) BIRDS FLY, BEARS DON'T
6 = (1) ACROSS THE FENCE
7 = (2-1) GLAD TO MEET YOU
8 = (2-2) GIVE ME A CLUE